

I. Listing of Claims

This listing of claims is being provided for the convenience of the Examiner. No amendments have been made herein.

Claim 1. (Original) A method of identifying the presence or absence of an agglomeration complex from a sample matrix obtained from an individual comprising the following steps:

(a) forming an admixture of said sample matrix with one or more nucleic acids, wherein said one or more nucleic acids are obtained from a nucleotide antibody library;

(b) incubating said admixture of step (a) under conditions suitable to form at least one agglomeration complex, wherein said agglomeration complex is represented by the following formula:



wherein A represents a protein and x is an integer having a value from one to infinity, B is a cellular binding cofactor, wherein said binding cofactor participates in the formation of the complex, and y is an integer having a value from 1 to infinity, and C is a nucleic acid selected from said library of nucleic acid antibodies and z is an integer having a value from 1 to infinity, wherein at least one of the groups consisting of A and B are present in said sample matrix, and the complex represented in brackets does not imply any order in A, B, or C, and A, B and C form an agglomeration complex through non-covalent bonds;

(c) detecting said agglomeration complex.

Claim 2. (Original) The method of claim 1, wherein said agglomeration complex exhibits decreased solubility in which said sample matrix is obtained from an individual affected with a prion-based disease.

Claim 3. (Original) The method of claim 1, wherein said agglomeration complex exhibits increased stability in the presence of proteolytic enzymes.

Claim 4. (Original) The method of claim 3, wherein said proteolytic enzyme is protease K.

Claim 5. (Original) The method of claim 1, wherein said agglomeration complex is isolated from said sample matrix to form an isolation product.

Claim 6. (Original) The method of claim 5, wherein said agglomeration complex is separated into components A, B and C.

Claim 7. (Original) The method of claim 6, wherein said components A, B, and C are identified and compared to components derived from a second sample matrix obtained from a second individual who is unaffected by a prion-based disease.

Claim 8. (Original) The method of claim 1, wherein said nucleotide antibody library is derived from naturally occurring NA.

Claim 9. (Original) The method of claim 1, wherein said nucleotide antibody library is derived from non-naturally occurring NA.

Claim 10. (Original) The method of claim 9, wherein said nucleotide antibody library comprises RQ11+12, MDV, MNV, MNV-AP1, MNVUP, MNVLO RNA, and combinations thereof.

Claim 11. (Original) The method of claim 1, wherein said nucleotide antibody library is derived from an individual exhibiting symptoms of a prion-based disease.

Claim 12. (Original) The method of claim 1, wherein said protein has at least two functional conformations, a first active conformation, and a second inactive conformation.

Claim 13. (Original) The method of claim 1, wherein said cellular binding factor is selected from the family of lipoproteins.

Claim 14. (Original) The method of claim 1, wherein said cellular binding factor is fibronectin.

Claim 15. (Original) The method of claim 1, wherein said protein is human recombinant prion protein.

Claim 16. (Original) A composition associated with an agglomeration complex, wherein said agglomeration complex is represented by the following formula:



wherein A represents a protein and x is an integer having a value from one to infinity, B is a cellular binding cofactor, wherein said binding cofactor participates in the formation of the complex through non-covalent interactions with macromolecules, and y is an integer having a value from 1 to infinity, and C is a nucleic acid selected from a library of nucleic acid antibodies and z is an integer having a value from 1 to infinity, wherein at least one of the groups consisting of A and B are present in said sample matrix, and wherein the complex represented in brackets does not imply any order in A, B, or C, and A, B and C form a complex through non-covalent bonds and non hybridization affinity.

Claim 17. (Original) The composition of claim 16, wherein at least one of the group consisting of A and B are present in a sample matrix of an individual exhibiting symptoms of the disease from which the agglomeration complex is associated.

Claim 18. (Original) The composition of claim 16, wherein said agglomeration complex exhibits decreased solubility in which said sample matrix is obtained from an individual affected with a prion-based disease.

Claim 19. (Original) The composition of claim 16, wherein A is a prion-protein.

Claim 20. (Original) The composition of claim 16, wherein said nucleotide antibody library comprises RQ11+12, MDV, MNV, MNV-AP1, MNVUP, MNVLO RNA and combinations thereof.

Claims 21-33. (Canceled)